

# A study on the mental health status of female college students from the perspective of ideology and politics

# —Take medical colleges as an example

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Abstract: From the ideological and political perspective, this paper evaluates the mental health of female college students by empirical means. Taking Medical College as an example, the evaluation indicators of mental health of college students are analyzed into depression, anxiety and attention. The research shows that the mental health status of female college students in medical colleges is in the sub-health state, and there is no significant difference in the dimension of family economic situation, but there are significant differences in the dimension of student origin, grade and personality. It is suggested that in the ideological and political work of colleges, the educative function of family in the process of mental health education of college students should be strengthened, the educational mode should be optimized, and the correct values of life should be guided. At the same time, colleges establish an effective social psychological counseling mechanism to guide college students in their studies and employment, so as to help them understand themselves, face themselves, have a correct positioning for themselves, and improve the effect of mental health education.

Keywords: Ideological and political education, medical colleges, mental health

#### 1 Introduction

With the rapid development of China's social economy and the acceleration of the socialization process, the knowledge structure and educational level requirements of various practitioners in all walks of life have also been improved, thus guiding and promoting the popularization of higher education in China. With the comprehensive expansion of colleges in China, the proportion and number of students entering colleges through college entrance examination have been rising in recent years. The main group of higher education, college students, have higher knowledge structure and quality level than the general population because of different training goals and education methods, and are an important new force for China's future economic development and social progress. Their health level, spiritual condition, cultural accomplishment and quality will directly affect the development of our country in the future. With the development of society, college students are faced with a more complex

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environment. On the one hand, the increasing number of graduates leads to the increasing employment pressure of college students; On the other hand, the progress of science and technology has raised the employment threshold and education level, and college students are facing more challenges[1]. In addition, college students also have academic, communicative, emotional and life pressure, such a complex relationship caused by the increasing number of psychological problems, gradually aroused the attention and attention of the majority of psychological researchers[2]. According to a survey conducted by the Chinese Center for Disease Control and Prevention, 16.0-25.4% of college students have general psychological problems such as mild anxiety and tension, and about 2.8% of them have mental health problems of varying degrees, some of which are serious enough to cause grief accidents[3].

With the continuous advancement of China's civilization process, women, as a specific group, increasingly reflect the importance and equal treatment of our country's development of female compatriots on the issue of equal opportunities for education. But at the same time, it can not be ignored that in higher education, some majors in employment and career selection and other issues are difficult to completely get rid of gender discrimination; In addition, the existence of factors such as sensibility, delicacy and sensitivity, which are unique to the character of female groups, makes college girls face the same kinds of schoolwork and life pressure as boys, and at the same time, they have to take into account the influence of other factors that may bring about mental health status<sup>[4]</sup>. However, there are clear differences in the choice of major among female students in medical colleges. With the increasing proportion of female students in various majors in medical colleges, gender differences still exist in the study intensity, career expectation and orientation, and employment demand of medical majors, and other factors are also increasingly affecting female students in medical colleges<sup>[5]</sup>. Therefore, the mental health status of female college students in medical colleges has become a part of the research field of college students' mental health that cannot be ignored<sup>[6]</sup>. By using convenient sampling method, Dai Xiaoyan and Guigueli evaluated the first-year female students in five medical colleges in Wuhan and found that the mental health of first-year female medical students was generally in normal condition<sup>[7]</sup>. Zhou Jing conducted a study on the mental health status of 1,596 female college students in two medical colleges in Anhui Province by means of questionnaire survey and assessment, and found that family economic status, place of origin and interpersonal relationship had a great impact on mental health<sup>[8]</sup>. However, it has not analyzed the law and characteristics of psychological development of female medical college students from the ideological and political perspective, solved the mental health problems of female medical college students, and promoted their healthy development.

Based on this, in order to explore the mental health status of female college students in medical colleges, this paper investigates the mental health status of female college students in medical colleges, measures the mental health status of female college students in medical colleges from three aspects of depression, anxiety and attention, finds the mental health problems of female college students in medical colleges, and puts forward solutions from the ideological and political perspective.

# 2 Research Design

#### 2.1 Research Tools

In order to understand the current mental health status of female college students in medical colleges, this paper takes female college students in North Sichuan Medical College as the research object, conducts relevant questionnaire survey, discussion survey and collates relevant data. The survey includes two parts. The first part is the basic information of the investigators, including family economic situation, student origin, grade and personality. Part of the mental health test scale is further modified and developed on the basis of the Sub-Health State Assessment Form developed by the key project of the national "Eleventh Five-Year Plan" science and technology support plan. It is divided into depression (Q1-Q6), anxiety (Q7-Q11) and attention (Q12-13), with a total of 13 items. The 5-level score is adopted, and the highest score is 65 points. The lowest score was 13, and the theoretical median was 39. The higher the score, the worse the mental health; If it is greater than the theoretical median, it is considered that their mental health level is in a sub-healthy state.

#### 2.2 Data Collection

1000 students (800 undergraduates and 200 postgraduates) were randomly invited to conduct a questionnaire survey on the mental health status of female college students in medical colleges. Questionnaires were distributed on site and collected through online survey platforms. A total of 964 questionnaires were collected from January 2022 to December 2022, of which 917 were valid. Cronbach's  $\alpha$  coefficient was tested for each dimension of the scale, and the results were shown in Table 1. Cronbach's  $\alpha$  coefficient was all above 0.8, indicating that the reliability level of the scale was high, and each measurement item of the scale had high internal consistency, which enabled further data analysis. AMOS25.0 was used to conduct confirmatory factor analysis on the questionnaire and it was found that all fitting indicators were shown in Table 2, indicating that the model was well fitted and reached an acceptable level.

Variable	Item	Cronbach's α Coefficient of deleted item	Cronbach's αCoef- ficient
	Q1	0.845	_
	Q2	0.871	
Depression	Q3	0.903	
	Q4	0.894	0.916
	Q5	0.882	
	Q6	0.837	
	Q7	0.915	
Anxiety	Q8	0.892	0.930

Table 1. Reliability test

	Q9	0.870	
	Q10	0.846	
	Q11	0.933	
	Q12	0.865	
Attention	Q13	0.914	0.922

Table 2. Validity test

Variable	X2/df	RMSEA	GFO	NFI	CFI	IFI
Depression	2.028	0.086	0.910	0.873	0.881	0.847
Anxiety	2.223	0.079	0.918	0.921	0.906	0.906
Attention	2.417	0.061	0.972	0.911	0.928	0.889

# 2.3 Statistic Analysis

In this paper, SPSS 17.0 software is used to conduct a basic description and statistical analysis on the data of depression, anxiety and attention of the sample female college students' mental health status obtained by the survey. As shown in Table 3, it can be seen from the table that anxiety scores the highest with only 5 items, followed by anxiety and attention scores the lowest. And the overall mental health score is 41.1586, the total score is 65, and the median score is 39, which means that the overall mental health score of female college students is slightly higher than the median. Therefore, the mental health of female college students in medical colleges is in a sub-health state. On this basis, SPSS 17.0 was used to analyze the correlation of mental health status of female college students in medical universities from the perspective of ideology and politics, and the following hypothesis was proposed:

Hypothesis 1: There are differences in mental health status of female college students with different family economic conditions in medical colleges.

Hypothesis 2: The mental health status of female college students in different places of medical colleges is different.

Hypothesis 3: The mental health status of female college students in different grades of medical colleges is different.

Hypothesis 4: There are differences in the mental health status of female college students with different personalities in medical colleges.

Table 3. Descriptive analysis of mental health status of female medical college students

Variable	Average	standard devia-	t	Sig. (Bil)
		tion		
Depression	17.4673	3.1357	.608	.542
Anxiety	18.9375	2.8390	2.320*	0.034
Attention	4.7538	2.6134	008	.987
mental health status	41.1586	1.5235	2.289*	.030

Note: \* indicates significant at 0.05 level.

# 3 Results

Based on the above assumptions, the data of the basic information in the first part of the questionnaire are sorted out and analyzed. Independent T-test was used to conduct the test, and the results as shown in Table 4 were obtained. According to the P-value (Sig.(bilateral) value) in the significance analysis, the P-value of all variables except attention was greater than 0.05, indicating that there were significant differences in attention of female college students with different family economic conditions in medical colleges, while there were no significant differences in other mental health conditions.

**Table 4.** Independent sample test of mental health status of female college students in medical colleges

Variable	poor family	Non-poor fam-	t	Sig. (bil
		ily		)
Depression	17.5815±2.12	17.1024±1.53	0.815	0.421
Anxiety	$19.2672\pm2.40$	$18.4251\pm2.64$	-0.88	0.772
			7	
Attention	$4.4170\pm2.38$	$5.3418\pm2.53$	-1.60	0.045
			4	
mental health	$41.3557\pm2.36$	$40.8693\pm2.27$	-2.28	0.779
status			8	

Note: \* indicates significant at 0.05 level.

The analysis of the mental health status of female medical college students in different places of origin was conducted by means of independent T-test. The results are shown in Table 5, and it is concluded that there are significant differences in the mental health status of female medical college students in different places of origin. The mental health status of female college students in rural places is slightly worse than that of urban students. However, the attention of female college students from rural areas is better than that of urban students.

**Table 5.** Local independent sample test of mental health status of female medical college students

Variable	Town	Country	t	Sig. (bi
				1)
Depression	$17.7381\pm1.89$	$16.9481 \pm 1.95$	-0.893	0.761
Anxiety	$18.1849\pm2.77$	$20.0320\pm2.14$	-0.887	0.038*
Attention	$5.0189\pm2.93$	$4.5485\pm2.07$	-1.604	0.029*
mental health	40.9419±2.45	41.5286±2.81	-2.288	0.031*
status				

Note: \* indicates significant at 0.05 level.

The analysis of the mental health status of female medical college students of different grades adopts the analysis method of single factor variance, and the results are shown in Table 6. It is concluded that there are significant differences in the mental health status of female medical college students of different grades. The mental health status of female postgraduates in medical colleges is worse than that of undergraduates, which is mainly related to the academic requirements of the current medical and health system. The study pressure, work pressure and scientific research pressure faced by postgraduates are greater than that of undergraduates, which makes the mental health status worse.

**Table 6.** Single factor variance analysis of mental health status of female medical college students

Variable	quadratic sum	F	significance
Depression	7.442	2.467	0.040*
Anxiety	8.248	3.920	0.019*
Attention	3.307	4.962	0.001*
mental health status	11.289	3.039	0.016*

Note: \* indicates significant at 0.05 level.

The analysis of the mental health status of female college students in medical colleges with different personalities was carried out by using the single factor variance method. The results are shown in Table 7, and the P-value of each variable is less than 0.05, that is, there are significant differences in the mental health status of female college students in medical colleges with different personalities.

Table 7. Univariate variance analysis of mental health status of female medical college students

Variable	quadratic sum	F	significance
Depression	9.185	5.031	0.001*
Anxiety	7.839	3.307	0.012*
Attention	3.521	2.514	0.039*
mental health status	12.184	2.508	0.040*

Note: \* indicates significant at 0.05 level.

In summary, hypothesis 1 is not valid, while hypothesis 2, 3 and 4 are valid. In other words, there is no significant difference in the mental health status of female medical college students in the dimension of family economic situation, but there are significant differences in the dimension of student origin, grade and personality.

### 4 Conclusion

Mental health is very important to college students, and it is the basis of college students' study, work and other aspects. Healthy psychology is conducive to the development of college students and is the key for college students to adapt to society. The mental health of college students is not only conducive to the development of students themselves, but also has significance for the country and even the whole nation, because college students are the strength of the country and the hope of the nation. Therefore, it is very important to understand the mental health status of college students

and explore the influencing factors. With the increasing proportion of female students in various majors in medical colleges, gender differences still exist in learning intensity, career expectation and orientation, employment demand and other factors are also increasingly affecting female students in medical colleges. Therefore, the mental health level of female college students in medical colleges is also a part that can not be ignored in the field of mental health research. From the ideological and political perspective, this paper uses empirical research methods to find that the mental health of female college students in medical colleges is in a sub-health state, and there are significant differences in the dimensions of student origin, grade and personality. The mental health status of rural students, postgraduate students and introverted female college students is poor. It is suggested to strengthen the educational function of family in the process of college students' mental health education, optimize the educational mode, and guide the erection of correct life values. At the same time, the school establishes an effective social psychological counseling mechanism, provides social psychological support for female college students, and provides academic and employment guidance for college students, so as to help them understand themselves, face themselves, and have a correct positioning for themselves.

# References

- Pant, N., Srivastava, S.K. The Impact of Spiritual Intelligence, Gender and Educational Background on Mental Health Among College Students. J Relig Health, 2019,58: 87–108.
- 2. Fernando L Vázquez, Otero P ,Olga Díaz. Psychological Distress and Related Factors in Female College Students. Journal of American College Health, 2012, 60(3):219-225.
- 3. Zhao Yumin. Practice exploration of mental health education for college students. Middle School Political Teaching Reference, 2022(9):1.
- 4. Sasaki H .A Study on the Mental Health Status and Life-style in University Freshman. Human Welfare Studies, 2008, 11:123-132.
- 5. Zhou Xuanyu, Liu Lin, Chen Yuanyuan, et al. Design and application of automatic assessment model of college students' mental health based on multi-modal data fusion. Electronic Education Research, 2021, 42(8):7.
- Xin Bin. Research on college Students' Mental health Education and early warning Mechanism Construction -- Review of College Students' Mental Health Education. Science and Technology Management Research, 2022, 42(19):1.
- 7. Dai Xiaoyan, Guigueli. Survey on mental health of female college freshmen. South China Preventive Medicine, 2019, 45(6):4.
- 8. Zhou Jing. Mental health status of female medical college students and its influencing factors. Shandong University, 2014.

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